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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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EXAMINER

DINH, MINH

ART UNIT PAPER NUMBER

2132

DATE MAILED: 11/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/849,126

Applicant(s)

MUALEM ET AL.

Examiner

Minh Dinh

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 September 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 24-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 24-43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. This action is in response to the RCE filed 09/12/2005. Claims 24-26, 29-31, 34-36 and 39-41 have been amended.

Response to Arguments

2. Applicant's arguments filed 09/12/2005 have been fully considered but they are not persuasive. Applicant argues (page 9, last three paragraphs) that Yoshida only teaches verifying the integrity of data transferred between a main board and a peripheral device (i.e., a hard disk) but does not teach verifying data transferred between two network devices, the information handling apparatus (IHA) and the network adapter, via a network infrastructure. The limitation "via a network infrastructure" is interpreted as "using/over a network". It is noted that the amended feature upon which Applicant relies on is not supported by the originally filed specification. The specification discloses that each network node/network device includes an IHA coupled to a network adapter (i.e., a NIC) via a local bus such as I/O bus and that data is transferred between the IHA and the NIC using direct memory access (DMA) (page 4, 1st full paragraph; page 5, 2nd paragraph). Figure 1 and the specification (page 2, 2nd paragraph) show that outgoing data from the IHA passes through the NIC before reaching the network and incoming data from the network passes through the NIC before reaching the IHA. Thus, the originally filed specification does not support the embodiment in which the IHA transferring the security association

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via a network infrastructure to a network adapter so that the network adapter can use the security association to perform offloading cryptographic functions.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 24-43 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claims 24, 29, 34 and 39 claim a method, apparatus, system and program for transferring security association (SA) from an IHA to a network adapter via a network infrastructure, the network adapter performing offloading cryptographic functions over incoming/outgoing packets using the SA. The limitation "via a network infrastructure" is interpreted as "using/over a network". The specification does not disclose that the security association (SA) is transferred from an IHA to a network adapter via a network infrastructure. The specification discloses that each network node/network device includes an IHA coupled to a network adapter (i.e., a NIC) via a local bus such as I/O bus and that data is transferred between the IHA and the NIC using direct memory access (DMA) (page 4, 1st full paragraph; page 5, 2nd paragraph). Figure 1 and the specification (page 2, 2nd paragraph) show that outgoing data from the IHA passes through the NIC before reaching the network and incoming

data from the network passes through the NIC before reaching the IHA. Thus, the originally filed specification does not support the embodiment in which the IHA transferring the security association via a network infrastructure to a network adapter so that the network adapter can use the security association to perform offloading cryptographic functions. For examination purposes, the amended feature that is not supported by the originally filed specification will not be considered. Claims that are not specifically addressed are rejected by virtue of their dependency.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 24-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anand et al (6,370,599) in view of Yoshida (5,928,372).

Regarding claim 39, which are representative of claims 24, 29 and 34, Anand discloses a system comprising: a network adapter being capable of being coupled to an information handling apparatus (IHA) via a bus (fig. 1, elements 53, 21-23), said network adapter comprising an integrated circuit capable of receiving a security association (SA) generated by said IHA (col. 8, lines 21-35; figures 3-4 and corresponding text). Anand teaches transferring data from the IHA (i.e., the CPU) to the

network adapter; however Anand does not teach verification of data transferred between the CPU and the network adapter, which is a peripheral device. Yoshida teaches data verification in a data transfer system in which a host processor transfers data and a first integrity indicator generated by the host processor to a peripheral device (i.e., the hard disk unit) and the peripheral device generates a second integrity indicator, verifies that the received data is similar to the data sent by the host processor by comparing said first integrity indicator to said second integrity indicator (col. 1, line 60 – col. 2, line 20; figures 20-21 and corresponding text). Anand and Yoshida are analogous art because they are from a similar problem solving area, which is transferring data from a host processor to a peripheral device. It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the Yoshida's teaching of data verification into the Anand system in order to insure the correctness of the reception data (col. 9, lines 47-54). Accordingly, the IHA generates and sends a first integrity indicator to the integrated circuit, the integrated circuit receives the first integrity indicator, generates a second integrity indicator based on said SA, verifies that said SA received by said integrated circuit is substantially similar to the SA generated by said IHA by comparing said first integrity indicator to said second integrity.

Regarding claims 25-26, 30-31, 35-36 and 40-41, Yoshida further discloses that the data checking integrity method used to generate the first and second integrity indicators is a cyclical redundancy checking computation method, a checksum computation method or a parity checking method (col. 10, lines 55-67).

Regarding claims 27, 32, 37 and 42, Yoshida further discloses that the peripheral device indicates the integrity of the data received to the host processor (figure 21, element 24).

Regarding claims 28, 33, 38 and 43, Yoshida does not explicitly disclose setting an integrity error indicator bit in a memory of the host processor. However, this feature is deemed to be inherent to the Yoshida method as element 24 of figure 21 shows that the peripheral device provides the comparison result signal to the host processor. The Yoshida method would be inoperative if there were no register/memory on the host processor to store the comparison result signal.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh Dinh whose telephone number is 571-272-3802. The examiner can normally be reached on Mon-Fri: 10:00am-6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MD

Minh Dinh
Examiner
Art Unit 2132

MD
11/25/05


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